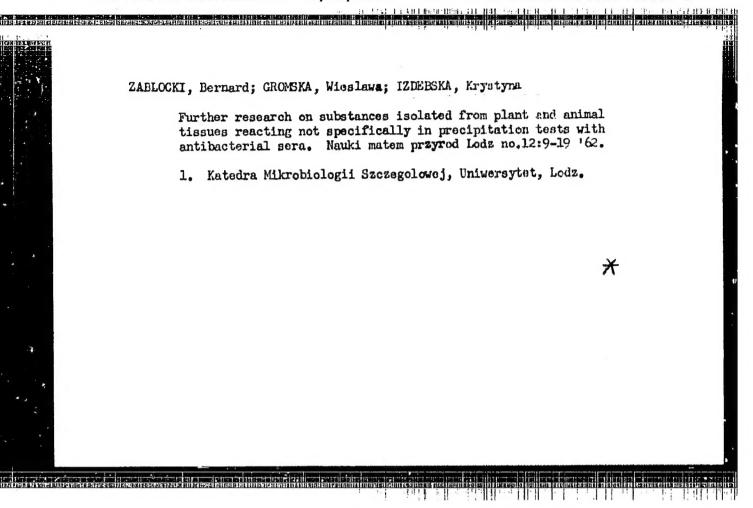
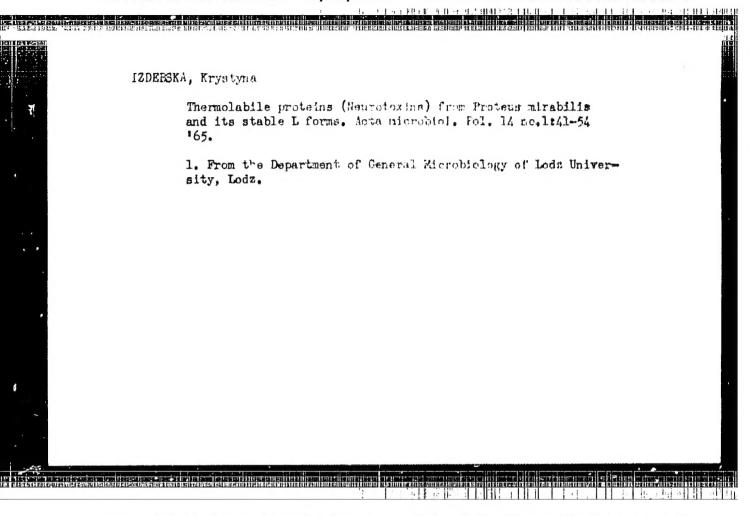


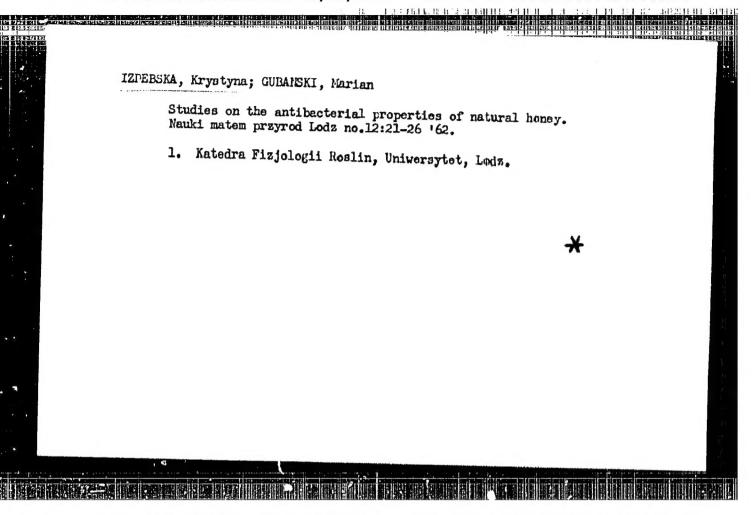
RCMANUSKI, Henryk; IZDEBSKA, Kazimiora; PRZEZDZIEK, Zofia

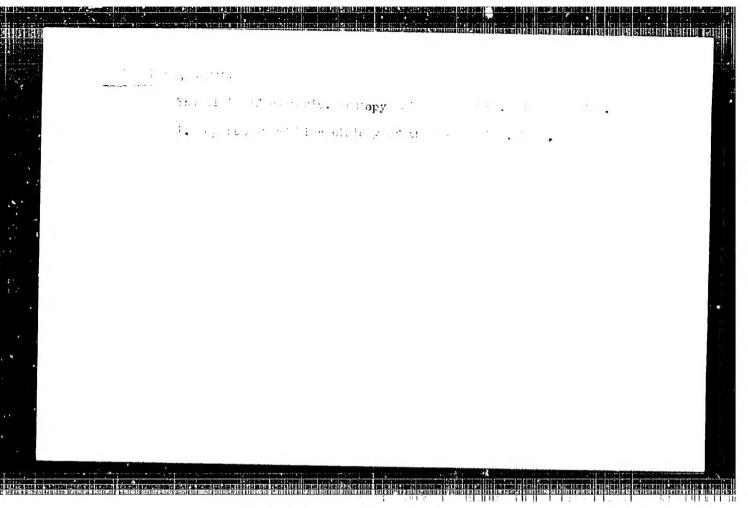
Hydrazine sulphate and hydroxylamine hydrochloride as specific agent for the detection of mercury and silver in toxicologidal analysis of chromographic paper mehtod. Farmacja Pol 16 no.21: 452-454 N '61.

1. Zeklad Chemii Tiksykologicznej i Sadowej, Akademia Medyczna, Lublin.

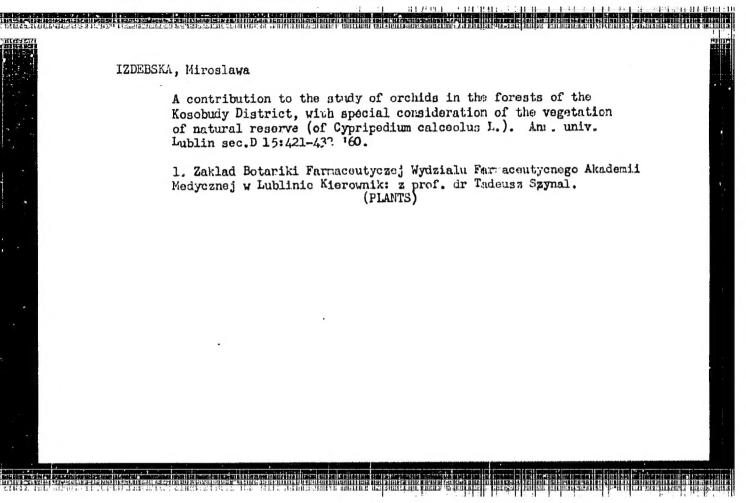








APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000619410001-9"



IZDERSKAYA, G.A. [Izdebs'ka, H.A.]; KIL'CHEVSKIY, N.A. [Kil'chevs'kyi, M.J.]

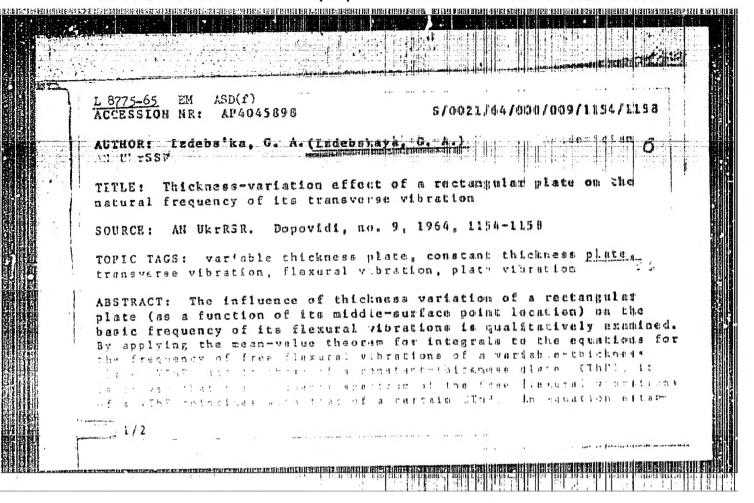
Convergence of the collocation method and optimal selection of the collocation points as applied to the integrodifferential equations of equilibrium in the theory of plates. Dop. AN URS no.4:469-472
'64. (MIRA 17:5)

1. Institut mekhaniki AN UkrSSR i Kiyewskiy politekhnicheskiy institut. 2. Chlen-korrespondent AN UkrSSR (for Kil'chevskiy).

IZDFBSKA-MAKOSA, Zuzanna; KIOTT, Maria; ROMINSKA, Eua; KIIMATEMIT, Harina; KOZIOROWSKI, Antoni

Diagnostic difficulties in the pulmonary fibrosis. Gruzlica
33 no.7:605-613 Jl '65.

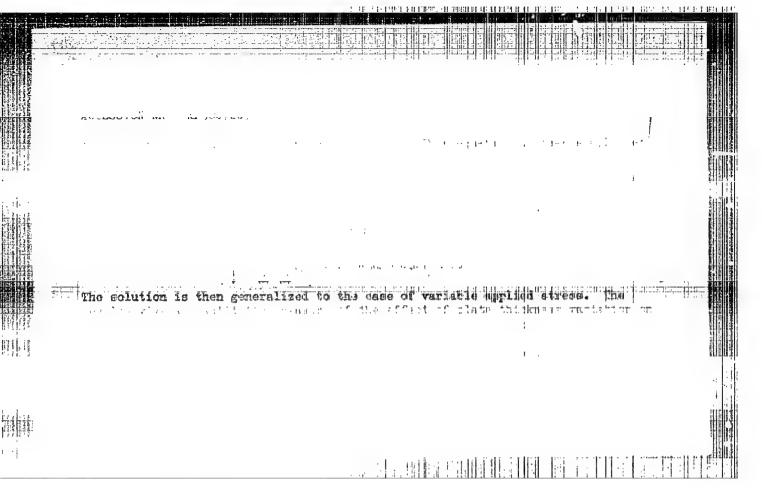
1. Z Kliniki Chorob Pluc (Kierownik: doc. dr. F. Krakowka),
z Zakladu Radiologii (Kierownik: prof. dr. K. Gssowska) i z
Zakladu Fizjopatologii (Kierownik: dr. A. Koziorowski)
Instytut. Gruzlicy.

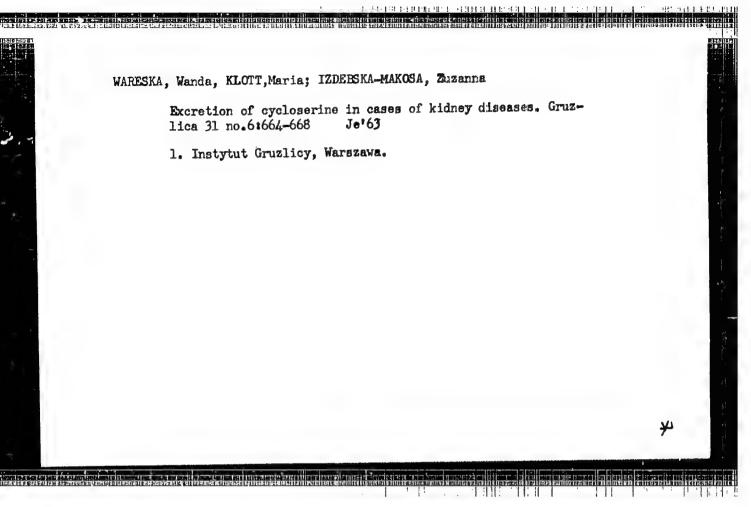


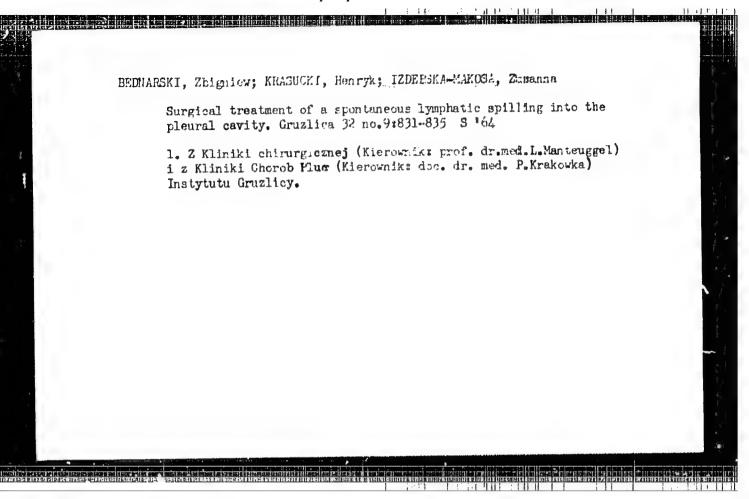
1. 8775-65 ACCESSION NR: AP4045398 lishing the relationship between a VThP aid a CThP (having the same frequency spectra) with respect to their decometrical and . . . physical parameters is derived. By using this equation, the spectrum of frequencies of a VThP can be determined by taking the frequency spectrum of the corresponding CThP. The data on the latter can be found, for certain boundary conductions, in a vibration handbook. This equation can be also used for approximate modeling of the free flexural vibrations of a VThP by means of a CThP. Orig. art. has: 14 formulas. ASSOCIATION: Kykyivskyky politekanichnyky imstyktut (Kiev Polytechnic Institute) SUBMITTED: 02Dec63 ATD PRESS : 1118 ENGLI SUB CODE: AS NO REF SOVE 003 OTHER: 000 12/2

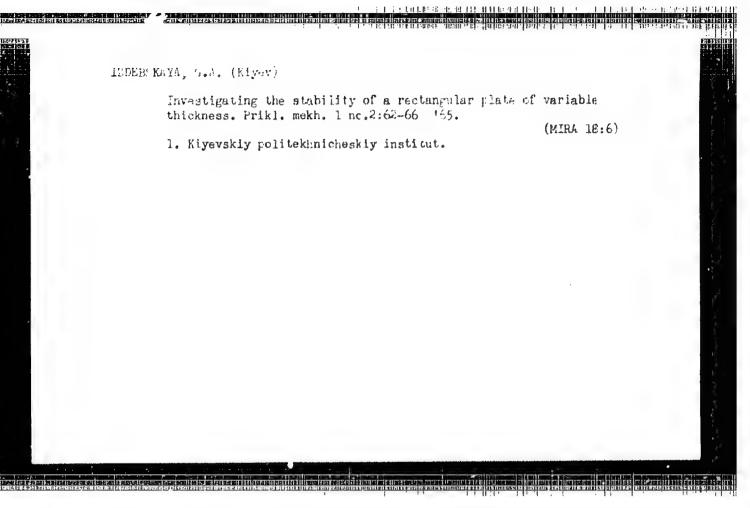
THE PERSON OF BUILDING PRODUCTION AND REPORT OF THE PROPERTY OF THE PERSON OF THE PERS

leef financian en in in 1945 en greek kindly bestelding water financial dividities.	पारकाराकारकार में त्यांकी रहते हैं है कि किस स्वीता की है। विकास स्वीता की विकास की की विकास की की विकास स्वात स्वाता करने की	11 11 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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L 33970-65 EnT(m)/EnP(m)/EPR ACCESSION NR: AP5007269	1/0198/ 1/401/002/006/700e6	
TUTHOR: Izdebskays, G. A. (Kie	lity of a rectangular p. to with carlable thickness	
SOURCE: Prikladnaya mekhanika	-v. 1, no. 2, 1965, (2+60	
Green Caretion, shear abress		
ABSTRACT: As approximate meth	od was used to determine the escribide of collection with a variable thickness slock one	<u> </u>
<u> </u>		
True to mitter military = 27	$a^{A_1} \subseteq A_1 \stackrel{\text{ind}}{\sim} \frac{\sum_{i=1}^{k} \sum_{i=1}^{k} A_i}{ A_i ^{2k}} dx$	
	where the constraints of the state of the s	
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POLAND / Organic Chemistry. Synthesis.

G-2

Abs Jour: Ref Zhur-Khimiya, No 7, 1959, 23426

: Bibiecki, S.; Haase, A.; Izdebski, J.; Kesler, E.; Author

Rvlski, L.

: Academy of Sciences of Poland - Inst Page Resident Inst

: Some Phthalazine and Pyridazine Derivatives as Title

Potential Hypotensive Agents.

Orig Pub: Bull. Acad. polon. sci. Ser. sci. chim., geol. et

geogr., 1958, 6, No 4, 227-233.

Abstract: A preliminary report on the research for new hypo-

tensive agents close to 1-hydrazinophthalazine (I) and 1,4-dihydrazinophthalazine (II). Hydrochloride of N-carbethoxy-N'-phthalazinohyprozine, melt. p. 212° (dissoc.), was obtained from 1 and C1COOC2H5. That hydrochloride, preserving the hypotensive properties of I, is 4 times less toxic

Card 1/3

CIA-RDP86-00513R000619410001-9" APPROVED FOR RELEASE: 08/10/2001 POLAND / Organic Chemistry. Synthesis.

Abs Jour: Ref Zhur-Khimiya, No 7, 1959, 23426

Abstract: than the latter. Hydrochloride of 1,4-bis-(carboethoxy-hydrazino)-phthalazine, melt. p. 2070 (dissoc.), synthetized from II in an analogous way, is deprived of hypotensive properties. 3-(pyridyl-3')-symm-triazolo-[b]-phthalazine, melt. p. 215-216°, and 3-(pyridyl-4')-symmtriazolo-[b]-phthalazine, melt. p. 253-2540, are formed by the interaction of I with hydrochlorides of nicotinic (III) and isonicotinic acids respectively in pyridine. A similar condensation of 3-hydrazino-6-phenylpyridazine, melt. p. 145-145° with III and IV results in 3-(pyridyl-3')-6phenyl-symm-triazolo-[b]-pyridazine, melt. p. 188-1890, and 3-(pyridyl-4')-6-phenyl-symmtriazolo-[b]-pyridazine, melt. p. 306-3070, respectively. The synthesis of hydrochlorides of

Card 2/3

BINIECKI, Stanislaw; IZDEBSKI, Jozef; ROZALSKA, Irma

Synthesis of some dedicthylaminoethylamino- and of some carbethoxyamino derivatives of isoquinollne. Acta pol. pharm. 19 no.5:437-441 162.

1. Z Zakladu Nowych Lekow Instytutu Lekow w Warszawie.
(QUINOLINES)

(CHEMISTRY, PHARMACRUTICAL)

INNERSKI. K.

Trees and shrubs of the yew-tree reservation in Wierzchias and the biological structure of the trees p. 5. (BIOLOGIA, Vol. 15, No. 1, 1956, Warsaw, Poland)

So: Monthly List of East European Accessions (EFAL) 10, Vol. 6, No. 9. Sept. 1957 Uncl.

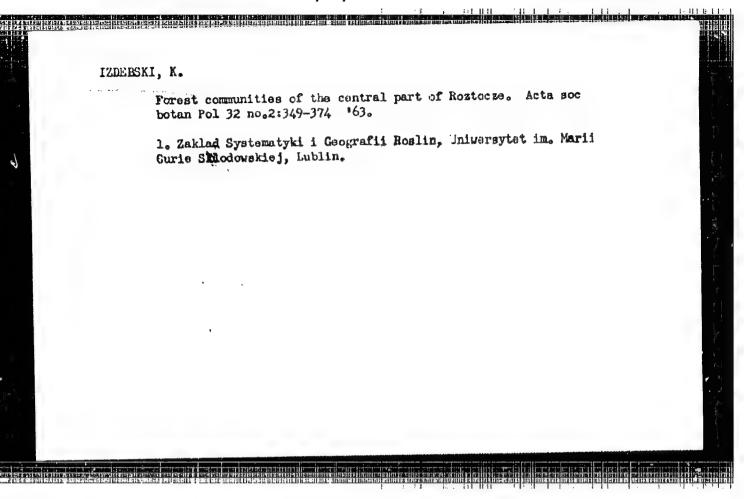
APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000619410001-9"

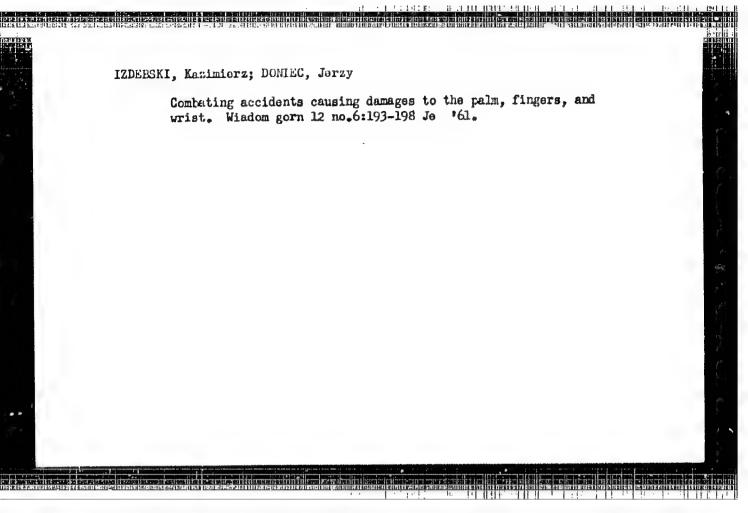
IZDEESKI, K.

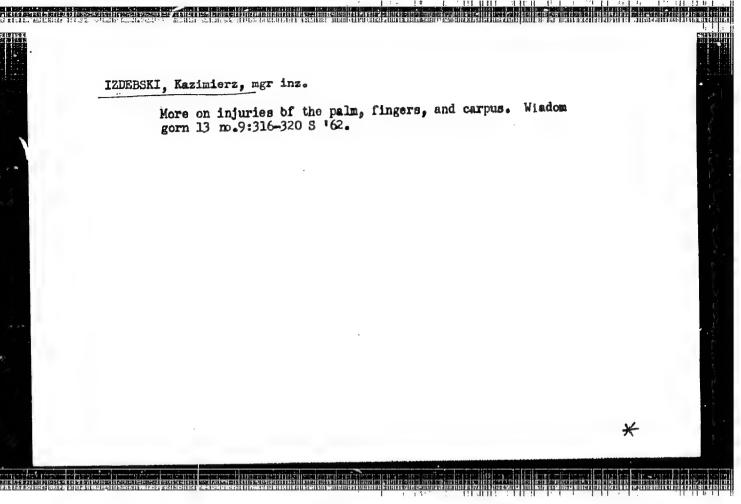
Projected steppe reservation in Katy near Zomosc.

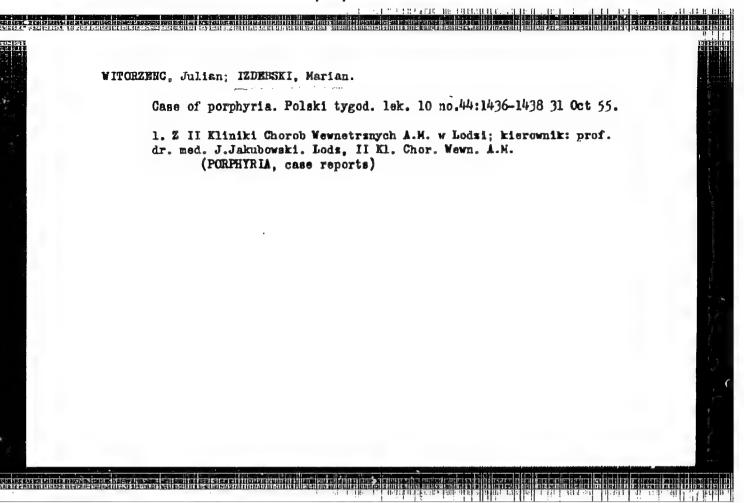
p. 21 (Chronomy Przyrode Ojczysta. Vol. 13, no. 5, Sept/Oct. 1957. Krakow, Foland)

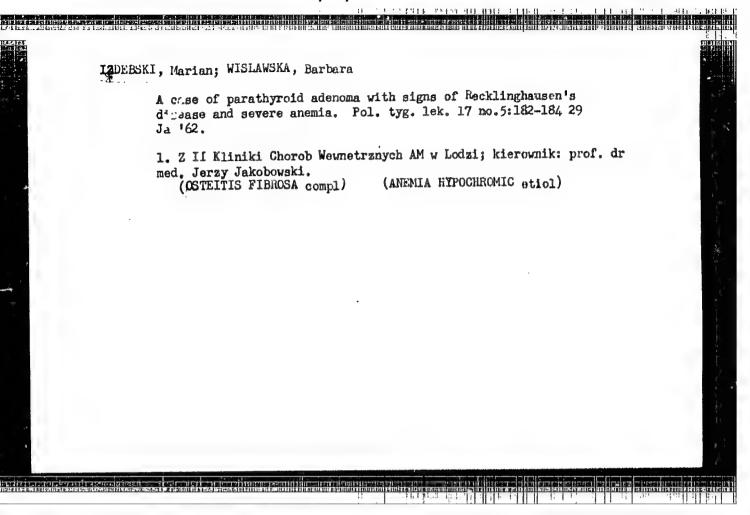
Monthly Index of East European Accessions (EE/I) LC. vol. 7, nc. 2, February 1958











IZDEBSKI, Marian; WISLAWSKA, Barbara

Acute allegic texic syndrome following meprobamate (miltown). Pol. tyg. lek. 17 no.10:363-364 5 Mr *62.

1. Z II Kliniki Chorob Wewnetranych AM w Lodzi, kierowniki prof. dr nauk med. Jerzy Jakubowski.

(MEPROBAMATE toxicol) (ALLERGY)

SZYKIER, Leon; IZDEBSKI, Marian; KULESZA, Wojciech

Results of the treatment of rhoumatoid arthritis with gold salts according to observations on 656 patients. Pol. tyg. lek. 22 nc.23: 912-914 4 Je '62.

1. Z Wojewodzkiej Przychodni Reumatologicznej w Lodzi; dyrektor: dr med. Leon Szykier.

(ARTHRITIS RIEUMATOID ther)

POLAND

JANCZUK, Zbigniew, JEDRIEJEWSKA, Teresa, SOBOTKOWSKI, Karimmiers, and IZDEBSKI, Marian, Department of Preventive Stomatology (Zaklad Stomatologic Zachowawosej) (Director: Prof. Dr. Mieosyalaw FUCHS), the Department of Radiology (Zaklad Radiologic) ("Kurator": Docent, Dr. Ludwik MAZUREK), and the Second Clinic of Internal Diseases (II Klinika Chorobwametranych) (Director: Prof. Dr. Jersy JAKUBOWSKI), ell of the AM [Akademia Hedyonna, Medical Academy] in Lods.

"On the Treatment of Sjögren Syndrome, Clinical Observa-

Warsaw, Polski Tygodnik Lekarski, Vel 18, Ne 3, 14 Jan 63, pp 100-104.

Abatract: [Authors! English summary modified] Three cases, with fully developed Sjörgen syndroms involving the eyes mucoss and joints, as well as the parotic gland, are described. Hormone, vitamin, tonic, and other standard treatment was of no avail, an no way was found to alleviate the patients. Of the 27 references, 7 each are Western and German, and 13 are Sastern Eloc.

POLAND

Drieba, Asland and Tradbaki, Marian, Second Clinic of Enternal Diseases (IT killiki Chareb Massastranych), Am [Akadamia Medyorne, Medical Academy] in Lode (Driveter: Prof. Oc. med. sci. J. Jaku Draki)

"Care of Dibanute dermitomyout the Souceasfully breaked with

Varsar-Krabon, Presslad Lakaraki, Vol 19, Ser 17, No 1, 63, pp 14-10.

Abstract: [Authors' English suchary modified] The authors describe the case and the treatment, and discuss the obetained results. There are 1) references, of which two (2) are German, four (4) leasure, and the belance Polish.

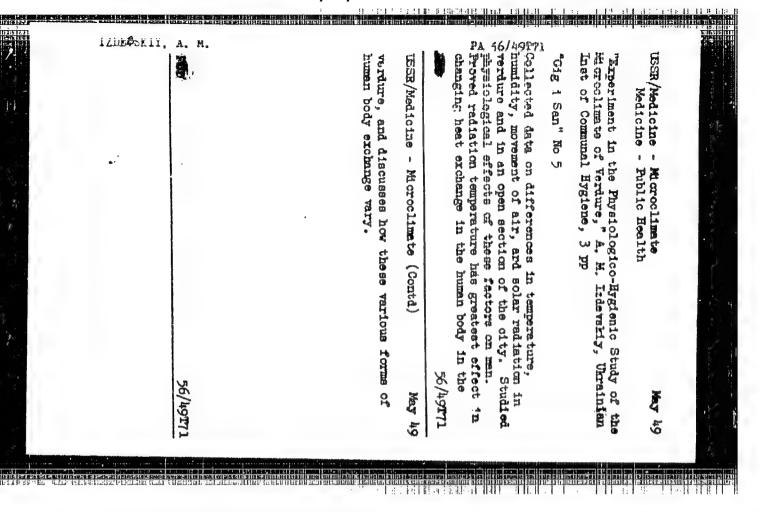
IZDIESKI, S.

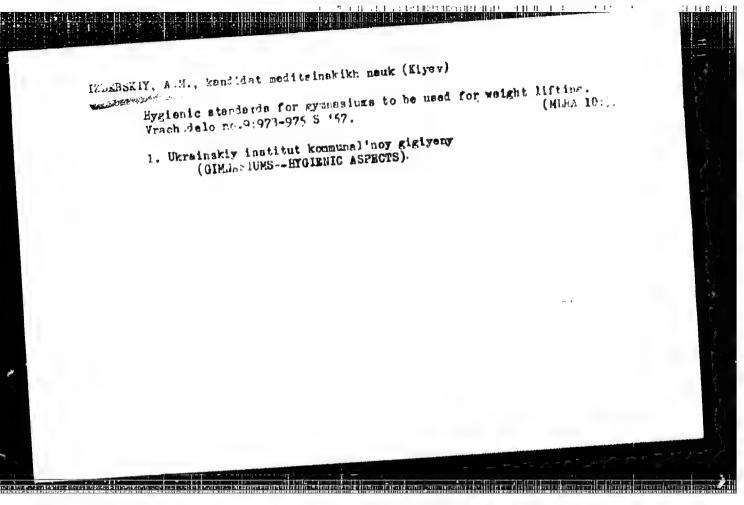
Care of motor vehicles during the winter. p. 33h
(MOTORYZACJA, Vol. 11, No. 12, Dec. 1956, Warsaw, Poland)

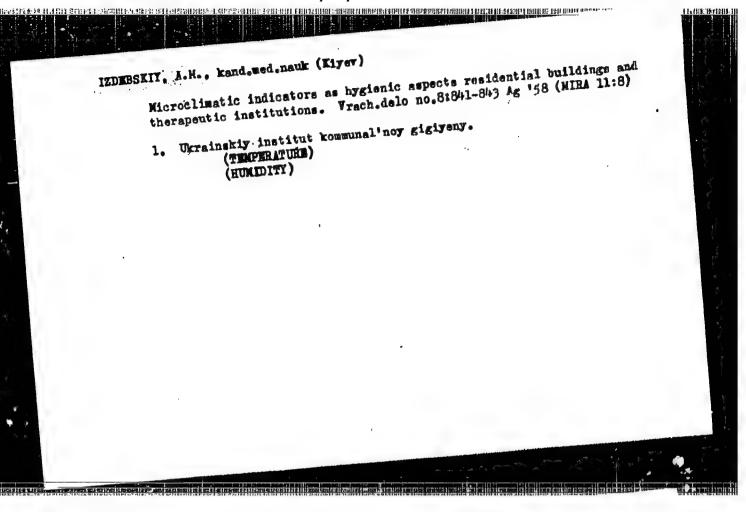
So: Monthly List of East European Accessions (EFAL) LC, Vol. 6, No. 9, Sept. 1957, Uncl.

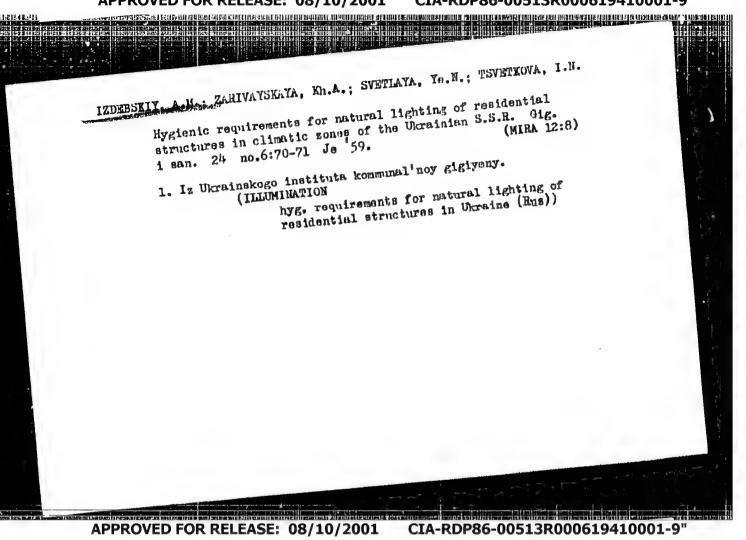
"APPROVED FOR RELEASE: 08/10/2001

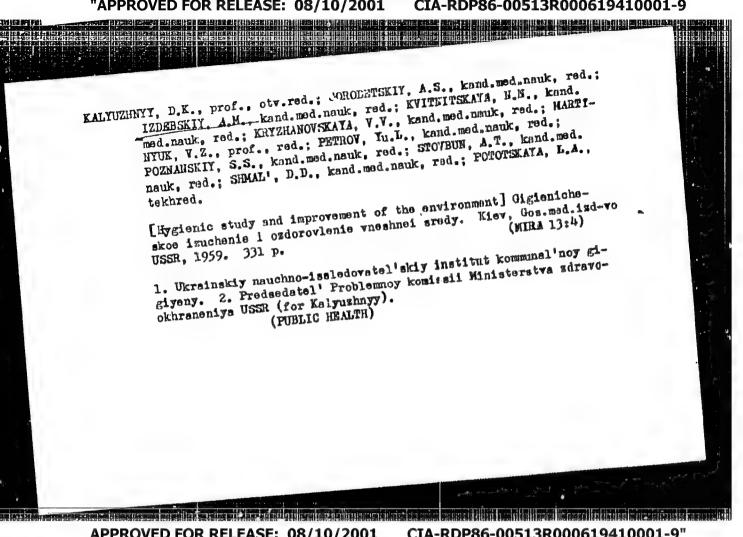
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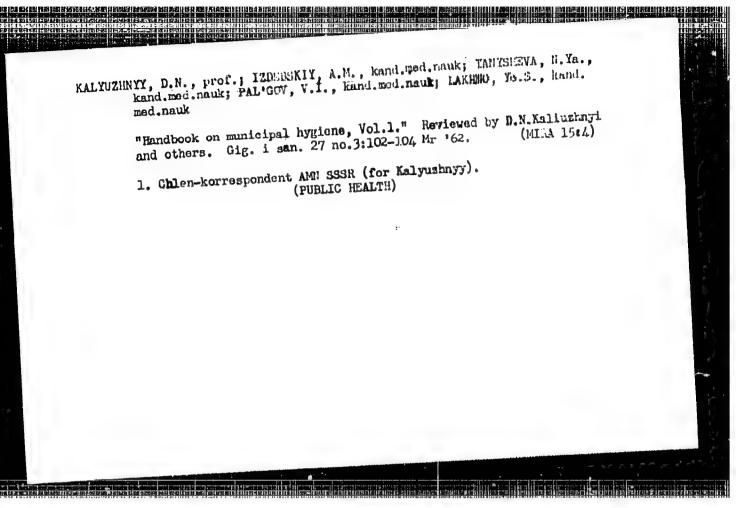


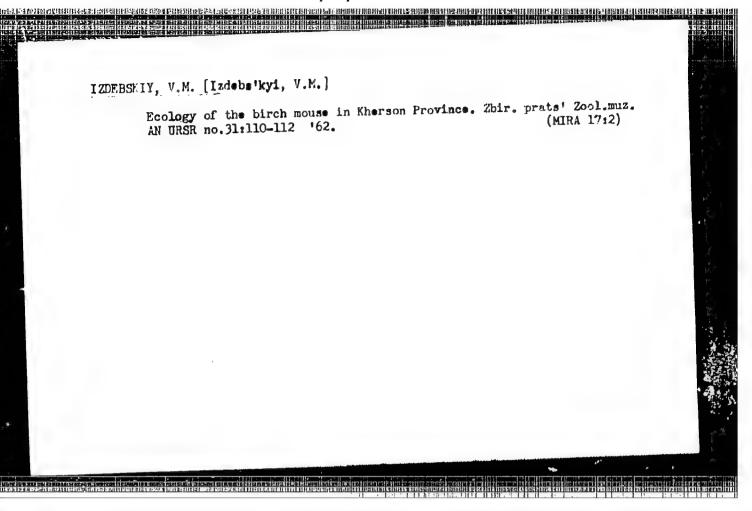


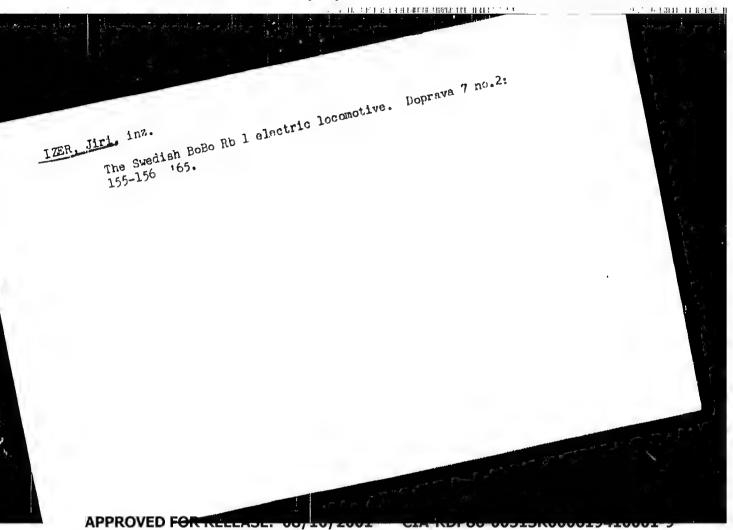


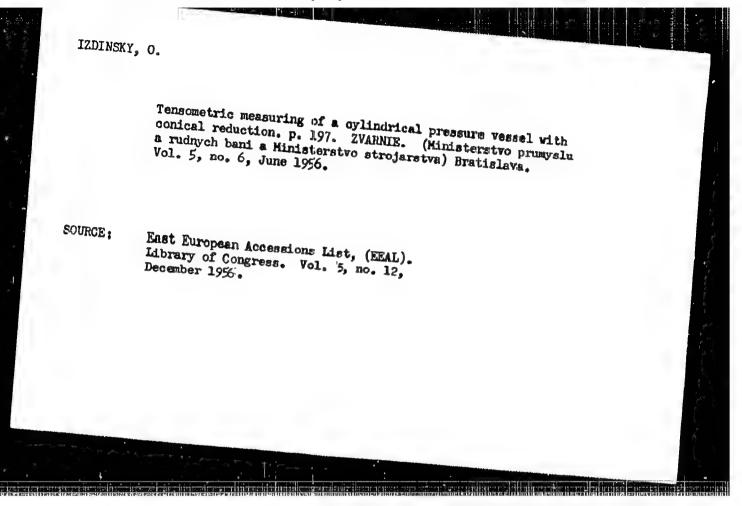












IZDINSKY, O.

Causes of cracking of metal sheets on the bottom of river boats. p. 108.

ZVARACSKY SBORNIK. (Slovenska akademie vied) Bratislava, Czechoslovakia. Vol. 8, no. 1, 1959.

Monthly list of East European Accessions (EEAI) LC, Vol. 8, no. 10, Oct. 1959. Uncl.

261,75

1.2300A 12300

2/046/61/000/003/002/002 D007/D102

AUTHOR:

Iždinský, Oskár, Engineer

TITLE:

Mechanical properties of welded toints of 424201.6 Al

PERIODICAL:

Zváračský sborník, no. 3, 1961, 295-308

The article describes welding tests performed at the $V\bar{U}Z$ Bratislava with Al-Cu_h-Mg alloy (material 424201.6) to determine the influence of welding heat on the mechanical properties of the welded rivet and screw joints. In addition to Al, the alloy metal contains in hardened state has the following mechanical properties: Tensile strength $\sigma_{10} = 14\%$; ultimate yield point $\sigma_{Kt} = 26 \text{ kg/mm}^2$; ultimate strength $\sigma_{Pt} = 40 \text{ kg/mm}^2$. The material for the tests was delivered by the Kovonuty Břidličná in plates of 2,000 x 1,000 x 8 mm. The following three welding methods were employed: (a) Automatic, argongas shielded welding using a steel backing plate with an oval groove;

Card 1/5

26475 Z/046/61/000/003/002/002 D007/D102

Mechanical properties....

(b) Argonarc method with nonconsumable tungsten electrode, 5 mm in diameter (no. 2 argon-holder); (c) Flame welding with preheating to 150°C, using Magna 41 flux and a no. 5 torch. Pickled 424232 filler wire, 2 mm in diameter, was used for automatic welding, and 5-mm-diameter wire was used for argonarc and flame welding. Four Welding edges were prepared normally for automatic welding, and they were beveled to 70° (V-weld) for argonarc and flame welding, and they welds were X-rayed before test specimens of the parent and weld metals were prepared. Some of the specimens were heat-treated (quenching at 500°C in water of 20°C; hardening at room temperature). Specimens were subjected to the following tests: Brinell hardness test at H_B 2.5/31.25/30; strength test according to CSN 1236 and 42 of atigue test (on a 20-ton Schenck pulsator with a maximum frequency of 2,200 rpm). For comparative purposes, single-row double shear rivet joints were made by cold-riveting, while screw joints were made with high-strength prestressed screws of plates with rough, brushed and sand-blasted surfaces, respectively. The results of the

Card 2/5

Mechanical properties...

26475 Z/046/61/000/003/002/002 D007/D102

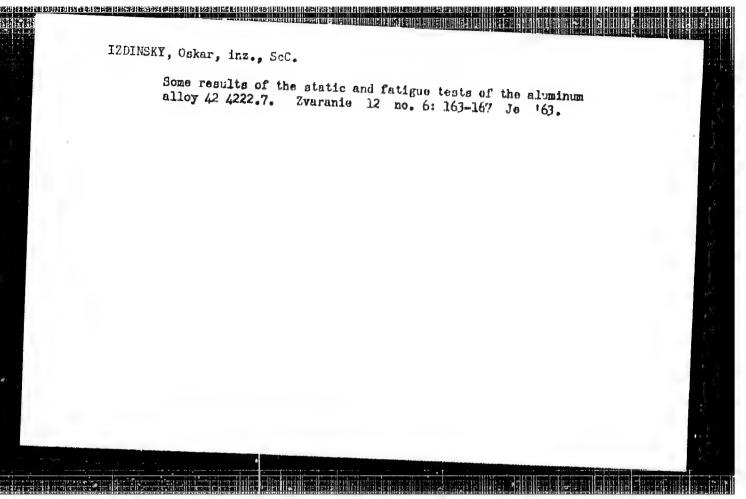
tests can be summarized as follows: (1) The welding heat affects a zone 80 - 90 mm along the welded seam and impairs the mechanical properties of the parent metal; (2) The strength of the welded joint reached only 40 - 50% of the strength of the parent metal when 424232 filler wire was used, and 60 - 70% when 424201 filler wire of the parent metal. The maximum bending angle was 40° in one case, already a poor 2.3 - 2.7 kgm/cm² for the parent metal, was further of the welded joint has no influence on the fatigue limit was further of the welded joint has no influence on the fatigue limit wnen cyclic stress is applied. In tests of fatigue strength for finite life, it increasing strength; (6) Under cyclic stress, the use factor of the gram is limited by the yield strength of the welded joint which is limit of the rivet joints is 45 - 55% lower than that of the parent metal; (7) The fatigue metal. Under average cyclic stress, the fatigue strength of rivet Card 3/5

Mechanical properties....

26475 Z/046/61/000/003/002/002 D007/D102

joints drops faster than that of welded joints and the use factor of the parent metal is also lower; (8) The fatigue strength of prestressed-screw joints with unprocessed surfaces is only 18% lower than that of the parent metal, and reaches that of the parent metal when the joint surfaces are brushed or sand blasted; (9) Welded joints do not reach the properties of the parent metal even when heat-treated and re-hardened. While the use of 424232 filler material effected an increase of strength and notch toughness, the use of the hardenable 424201 filler material failed to improve the mechanical properties after postwelding heat treatment. Neither could an advantageous influence of postwelding heat treatment be observed in bending and cyclic-stress tests. Tests resulted in somewhat more spread and steeper Wöhler lines at practically the same lower fatigue limit; (10) The heat treatment partially reduced the heat-affected zone. However, the welded material remained soft and unhardened even when hardenable filler material was used. This is attributable to the fact that alloying elements are burnt during welding. are 14 figures, 1 table and 7 references: 6 Soviet-bloc 1 non-Soviet-

Card 4/5



"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619410001-9

w/137/62/000/004/162/201 A154/A101

AUTHOR:

Iždinský, 0..

TITLE:

The mechanical properties of welds made between 424400,7 aluminum

PERIODICAL:

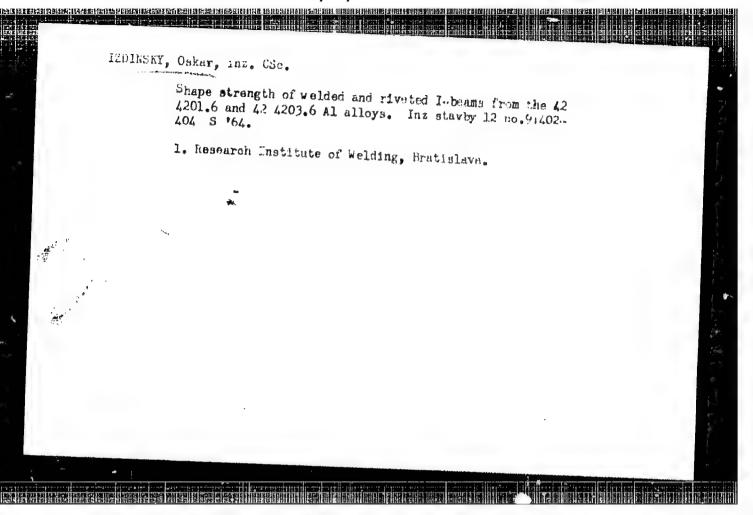
Referativnyy zhurnal, Metallurgiya, no. 4, 1962, 17, abstract 4E77 ("Zváranie", 1961, 10, no. 11, 330 - 335, Slovak, Russian, English

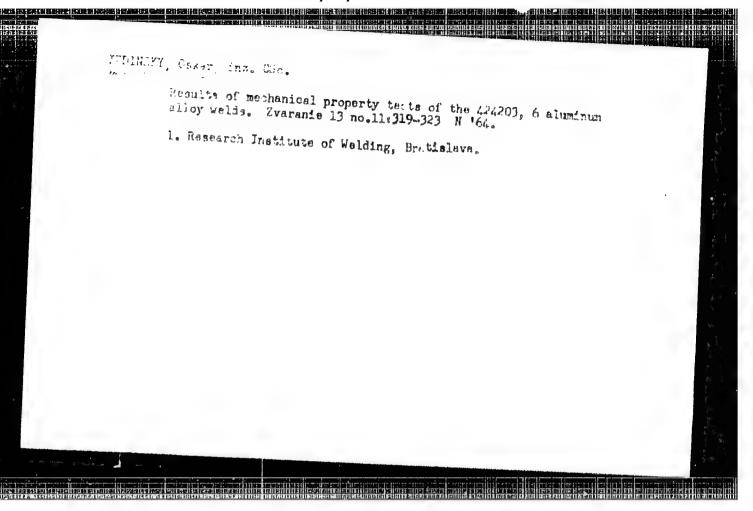
and German summaries)

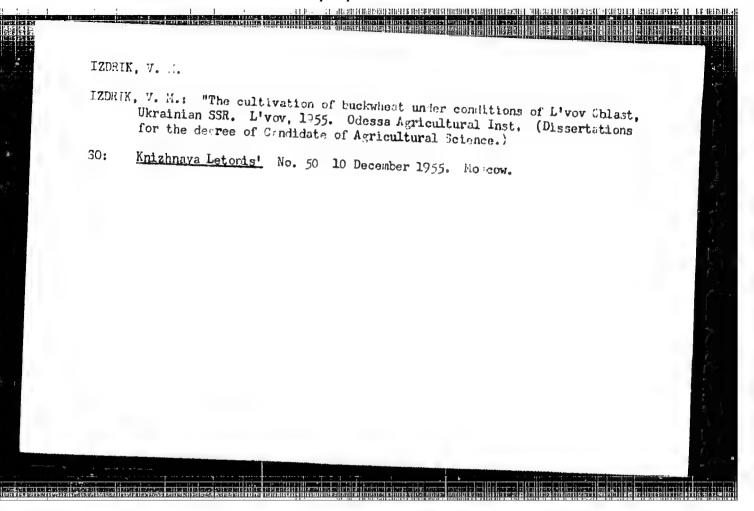
TEXT: Static and fatigue tests were made of butt welds in Al-Mg-Si alloy. The test results were compared with the mechanical properties of the base metal and threaded joints. The welds were made by automatic welding and arc welling in an argon medium. The tests were made on welds in the non-heat-treated state and In the quenched and hardened state. The threaded joints were made by the normal means and had phrehigh-stressed screws and variously treated butt surfaces. It is stated that the welded joints do not yet give satisfactory results, whereas the joints with the prehigh-stressed screws behave satisfactorily also under cyclic

[Abstracter's note: Complete translation]

Card 1/1







MATELSCU, Dan, prof. ing.; FIESERIU, I.; FIESERIU, E.; GADEARU, L.;
BOTA, V.; ROSU, D.; FILINON, I.; MAIOR, N.; IEDRAHA, V.;
PAUNESCU, M.; ROSA, Sidonia

Economical, technical and scientific study on the construction of some apartment houses with metallic framework of light elements.
Pt. 1-3. Bul St si Tehn Tim 7:287-321 '62.

PAUNESCU, M., ing., MIHAIESCU, A., ing., GUTESCU, D., ing.

IZDRAILA, V., ing.

Utilization of acicular filters and secant piles for the construction of sile foundations. Rev constr si mat constr

15 no. 11: 580-585 N *63.

CI JNTAY USSR C. PAGORY M-1 A.S. JUJR. : R2Biol., No. /9, 1952, No. 87038 SORT A : Izdrik, V. M. T ST. T TLE : Some Procedures for Increasing the Yield of Buckwheat in the L'vevskaya Chlast'. O.IG. PUB. : Zemledeliye, 1957, No 2, 33-35 : A study was made of the effects of the time and methods of sowing, and of application of phosphorite meet fertilizer, on yields of buckwheat of the variety Vir nikovskaya local (experiments during 1952-1955 by the L'tov Agricultural Institute). Under conditions of the L'i ovskaya Oblast' buckwheat grows best when planted between 15th and 25th of May, when sowed at that time, the pleats develop under conditions of low temperature which has a beneficial effect on yield of grain. When sowed in Jure, flowering and ripening takes place at a high temperatire (up to 30°). During this period heavy precipitation usually occurs as a result of which the buckwheat develops 27

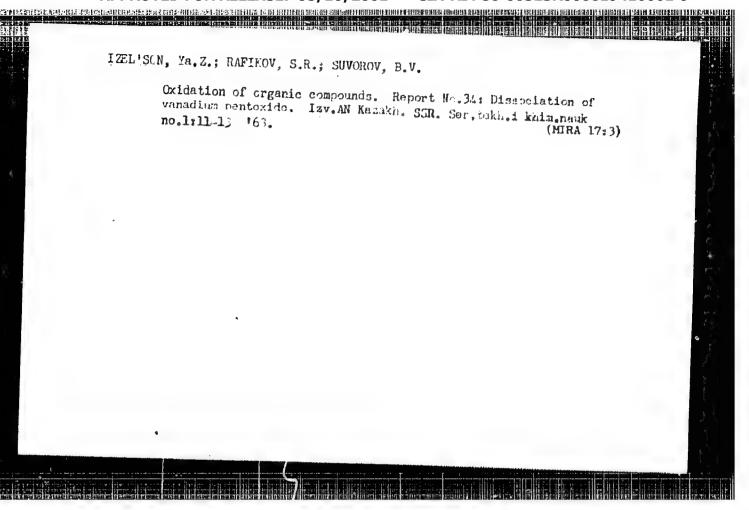
· USSR / Cultivated Plants. Grains. Logumes. Tropical M-1 Cereals.

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 6259

is 80 kg/ha. In the case of wide-row sowing the best rate is 50 kg/ha.

Card 2/2

37



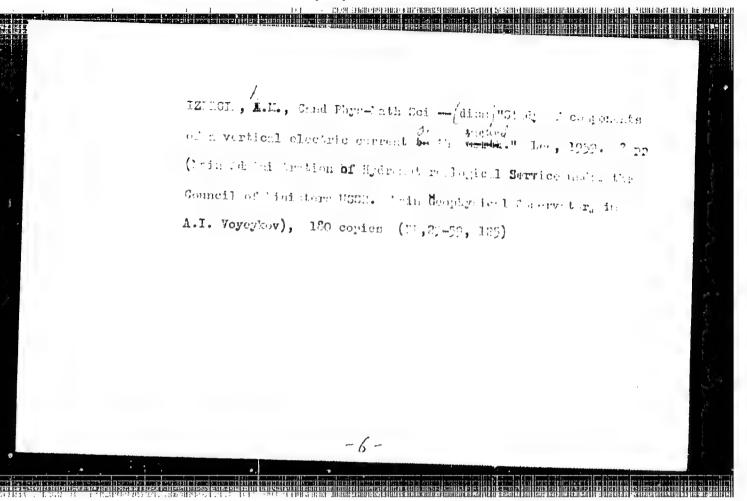
IZERA, V.

SCIENCE

PERIODICALS: METEFOLOGICKE ZERAYY. Vol. 11, no. 4/5, Cet. 1058

IZERA, V. A new design of the apparatur for meas ring diurnal arch of the sun. p. 60

Monthly list of Wast European Accessions (SMAI) LC, Vol. F, no. 5 May 1050 Unclass



SOV/49-59-6-17/21

AUTHOR: Izergin, A. M.

The Air-Earth Convective Electric Current. TITLE:

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geofizicheskaya, 1959, Nr 6, pp 919-923 (USSR)

ABSTRACT: The vertical electric current in the atmosphere (Eq 1) can be determined by one of the following two methods: 1 by measuring the magnitude of the charge (Refs 5 to 7) or. 2 - by measuring the tension (Eq 2) (Refs 8-10). The convective current can be expressed as the density of the volumetric electric charge at the earth's surface, Eq (j). The functional relationship in this case will be defined as Eq (4) for the conditions, Eq (5), i.e. the current can be calculated from Eq (6) (Ref 2). In order to verify the above equation, the experiments were carried out with an earthed, horizontally placed plate, the current in it being calculated from Eq (7). The measurement of the conductivity and the induction was performed by means of a netted screen spread horizontally above the plate. The current below it was calculated from Eq (8). The results of experiment are illustrated in the table on p 920, and in Figs 1 and 2. Fig 1 shows the diurnal distribution of the convective current, Fig 2

Card 1/2

307/49-59-6-17/21

The Air-Earth Convective Electric Current

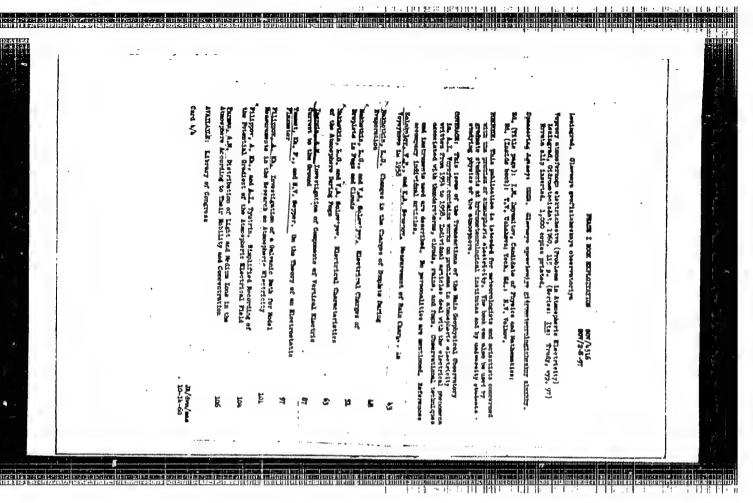
illustrates the current observed on September 3-4, 1957. Thanks are given to I. M. Imyanitov and I. I. Bessonov for their advice. There are 2 figures, 1 table and 20 references, of which 10 are Soviet, 6 are English and 4 German.

ASSOCIATION: Kirovskiy gosudarstvennyy pedagogicheskiy institut imeni V. I. Lenina (Kirov State Pedagogical Institute im V.I.Lenin) SUBMITTED: May 5. 1958.

Card 2/2

"APPROVED FOR RELEASE: 08/10/2001

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"APPROVED FOR RELEASE: 08/10/2001

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en destruit ett i biskust fraunskaldenni en der Hestrick 3/049/62/000/005/003/003 3.5130 D207/D308 AUTHOR: Izergin, A.M. TITLE: Vertical convective electric current in the atmosphere PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya geofizicheskaya, no. 5, 1962, 709 - 710 TEXT: The work is an extension of an earlier investigation by J.H. Hraakevik, reported at the Second Conference on Atmospheric Electricity held in Portsmouth (USA) on May 22 - 23, 1958. The present author reports calculations of the density of the vertical convective current (jcv) in the atmosphere near the earth's surface. The values of j_{CV} were deduced from 1956 and 1957 measurements of the density of the total vertical current to earth (1) and the density of the conduction current near the earth (j_{CN}); $j_{CV} = i - j_{CN}$. It was found that j_{CV} was 34 - 64% of i and opposite in direction to it, except on one occasion in 1956 when j_{ov} was 10 % of i and in the same direction as i. Card 1/2

IZERGIN, A. P.
 "Dielectric Properties of Mich of Phlogopite, Muscovite, and Some Crystal Hydrates in Electric Fields of Industrial and Audible Frequencies." Tomsk State U imeni V. V. Kuybyshev, Tomsk, 1955. (Dissertation for the Degree of Candidate of Fhysical and

SC: <u>Knizhnaya Letopis</u>, No. 22, 1955, pp 93-105

Mathematical Sciences)

137-1958-2-2763

Translation from Referativnyy zhurnal, Metallurgiya, 1958, Nr 2, p 79 (USSR)

AUTHOR: Izergin, A.P.

TITLE: On the Growing of Germanium Monocrystals From a Melt (K

voprosu o vyrashchivanii monokristallov germaniya iz rasplava)

PERIODICAL: V sb.: Vopr. metallurgii i fiz. poluprovodnikov. Moscow, AN SSSR, 1957, pp 47-49

ABSTRACT:

A comparison is made of designs of apparatus for pulling single crystals of Ge by the Chokhral'skiy method with the aid of either a slotted graphite heater or by heating the melt from the outside of a quartz vacuum chamber in a high-frequency field or in a resistance furnace. The opinion is expressed that the latter procedure is better, because it tends to eliminate the graphite, steel, and Cu elements which are sources of impurities that get into a melt. Schematic drawings and descriptions of the apparatus are included.

1. Crystals-Growing

Card 1/1

Report presented at a Conference on Solia Dielectrics and deminondurtors, (Elektrichestvo, '56, No. 7, 33-36)

IddioIN, a. r.

Izergin, A. P. and others (SFTI)

"A method for the breeding of germanium monocrystals with even distribution of the admixtures from the melt without melting pot"

Report presented at a Conference on Solid Dielectrics and Semiconductors, Tomak Polytechnical Inst., 3-8 Feb. 58. (Elektrichestvo, '58, No. 7, 83-86)

AUTHOR: Izergin, A. F.

TITLE: Purification of Liquids by the Method of Zone Melting (Ochistka zhidkostey metodom zonnoy playki)

PERTODICAL: Izvestiya vysshikh ochebnykh zavedeniy, fizika, 1958, Nr 5, pp 115-116 (USSR)

ABSTRACT: The paper was presented at the Conference of Higher Education Establishments on Dielectrics and Semiconductors, Tomak, February, 1958. The method of zone melting is used widely in purification of solids (Refs.1-6). Its theory was given by Reiss (Ref.7). The present paper deals with application of the zone melting method to purification of certain liquids. Furification of water by means of zone melting was briefly reported at the All-Union Conference on Bemiconducting Materials, Moscow, April 1957. In the study of properties of semiconducting monocrystals the author found it necessary to use very pure water and very pure acids in preparation of attachents. This suggested that the method of zone melting might possible be applied to purify some liquids. The method is, in principle, very simple. A liquid is frozen by means of liquid air or by some other method and then subjected to the usual operations of zone melting. The first liquid to be Card 1/3 subjected to zone melting purification was water. Doubly

307/133-58-5-24/35

Purification of Liquids by the Method of Zone Melting

distilled water was frozen in a quartz boat. Two molten zone? were produced in the ice block and the boat was moved at the rate of 2 cm/hour. Both ends of the ice block were cut off after zone melting and the middle portion was melted and heated to +20°C. It was found that the electrical resistivity of water, which was 4.7 x 106 ohm cm before zone melting purification, increased after quadruple zone melting to 4.2 x 107 ohm cm. This resistivity fell quickly with time, probably because of dissolution of the quartz boat. To purify alcohol, the latter was placed in a polytetrafluorethylene (Fluorplast-4) boat. The alcohol was cooled with liquid air until it froze. After quadruple zone melting the amount of water in the alcohol was reduced from the original 4% to 1%. The author also purified hydrochloric acid with 0.3% of iron. Again, a Fluorplast-4 boat was used and the acid was frozen by means of liquid sir. The molten zone moved at the rate of 2 cm/hour. After quadruple zone melting the content of iron fell to 0.05%. Student Yu. S. Pablenko took part in this work. L.N.Razanova

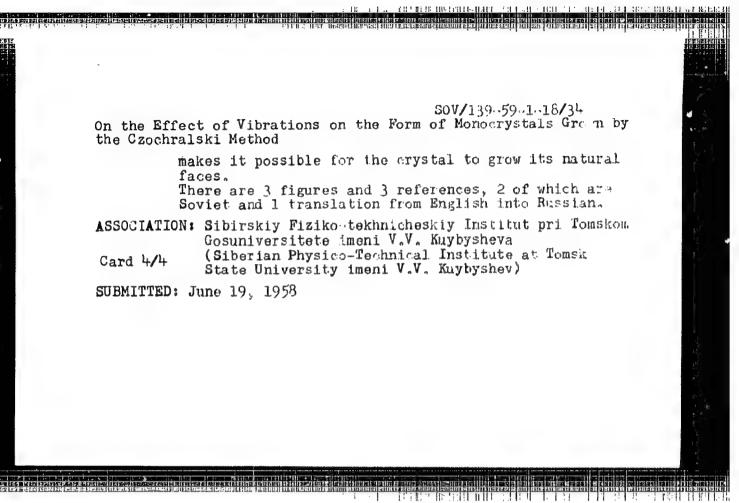
Card 2/3

24(2) SOV/139..59.-1.-18/34 AUTHORS: Izergin A.P., Pavlenko Yu.S. and Stroitelev S.A. On the Effect of Vibrations on the Form of Monocrystals Grown by the Chekhralskiy (Czochralski) Kethod (O TITLE: vliyanii vibratsiy na formu monokristallov, vyrasnchemnykh po metodu Chokhral'skogo) PERIODICAL: Izvestiya Vysshikh Uchebnykh Zavedeniy, Fizika, 1959, Nr 1, pp 107-110 (USSR) ABSTRACT: Alkali-halide monocrystals grown from melt by the Czochralski method at constant temperature and a constant rate of withdrawal are roughly cylindrical in shape. Cross-sections of such crystals depend primarily on the form of the melt meniscus which is determined by the surface tension and the temperature distribution in the crucible. When monocrystals are grown by the Czochralski method with rotation of the seed, vibrations of the melt and the crystal holder usually occur. It was found that monocrystals grown under the conditions of rotation and vibration were no longer cylindrical but had definite faces. The cross-sections were roughly square if the seed Card 1/4 was withdrawn in the direction [100] (Fig 16) and trigonal (triangular) or ditrigonal in the direction [11]

SOV/139-59-1-18/34 On the Effect of Vibrations on the Form of Monocrystals Grown by the Czochralski Method

(Fig 17). In the first case the crystal is a square pseudo-prism whose side faces in KCl correspond to [100]. In the second case the crystal is a trigonal or ditrigonal prism and its faces were "hatched", i.e. they consisted of steps formed by faces of a cube. These effects were also observed on growing germanium monocrystals by the Czochralski method using the apparatus constructed at the Siberian Physico-Technical Institute and described earlier (Ref 1). Germanium monocrystals grown in the direction [11] without vibrations and without rotation of the seei, were of roughly cylindrical shape, as shown by Fig 2a. On drawing of germanium crystals in the direction, a roughly square pseudo-prism was obtained (Fig 26) whose side face corresponds in general to the crystal direction [11]; but it is "hatched" and it consists of steps formed by octahedral faces [111]. When germanium crystals were drawn in the direction [11] a trigonal criditrigonal pseudo-prism was obtained (Fig 20), whose side faces were also "hatched" and formed octahedral steps. Card 2/4 The tendency of germanium monocrystals to assume the form

SOV/139-59-1-18/34 On the Effect of Vibrations on the Form of Monocrystals Grown by the Czochralski Method {| 111 | is quite natural since in free growth in a melt (when the crystal is not drawn) germanium grows in octahedral form (Ref 3). The authors grew crystals without rotation of the seed but transmitting 2 - 20 c/s vibrations directly to the melt itself. It was found that increase of the vibration intensity produced crystals with clearer faces than rotation of the seed and consequent vibrations. Crystals of small diameter were found to have more clearly defined faces (Fig 3). At the same amplitude and frequency of vibrations the faces of germanium monocrystals appeared less clearly than in alkali-halide salts. The authors suggest that the vibrations of the melt and the crystal holder and rotation of the seed equalise the conditions of Card 3/4 crystallization along the whole surface of separation between the solid and liquid phases. This probably



L LEKGLN, A.P

66306

-9(3), 24(3) 24.7100

SOV/143-59-5-4/19

AUTHORS:

Vorob'yev, A.A., Doctor of Physical and Mathematical Sciences, Professor, and Izargin, A.P., Candidate of

Technical Sciences, and Kevroleva, K. M.

TITLE:

Electrical Properties of Crystal Mydrates

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy - Energetika,

1959, Nr 5, pp 26-34 (USSR)

ABSTRACT:

The authors review the research work conducted in the field of electrical properties of crystal hydrates at Tomsk vuzes. The specific inductive capacitance and the dielectric loss angle were discussed in this paper, as well as the electrical strength of crystl hydrates. The investigations were conducted in wide ranges of temperatures and frequencies and different durations of single high-voltage pulses. At the labor-

atories of the Tomskiy politekhnicheskiy institut (Tomsk Polytechnic Institute) and the Sibirskiy fiziko-tekhnichskogo institut (Siberian Institute of Phy-

sics and Technology) investigations were conducted on

Card 1/4

the dielectric properties of crystal hydrates in

Electrical Properties of Crystal Hydrates SOV/143-59-5-4/19

dependence of temperature, frequency of the electrical field, degree of dehydration, chemical composition and structure of matter. A large number of mice types of the East Siberian deposits were studied. In papers of N.P. Bogoroditskiy and V.N. Malyshev / Ref 17, S. M. Yakimets / Ref 27 and M.M. Mikhaylov / Ref 37 different results were obtained for carious characteristics of mica. In the papers /Ref 4-10/ by K.A. Vodop'yanov, A.P. Izergin, I.G. Vorozhtsova, the maxima of curves are shown, representing the temperature dependencies of tg δ and ξ in the phlogopite mica, and one frequency maximum of tg 6 . The dependence of tg 6 and Ein phlogopite mica frequency and temperatures are shown in graphs, Figure 1, 2 and 3. Figure 4 shows a graph of the temperature dependence of \hat{E} and tg δ in muscovite, while Figure 5 shows the temperature dependence of muscovite before and after exposure to gamma radiation. Figures 6, 7,8, show graphs of the frequency and temperature dependencies of tg δ and $\mathcal E$ in gypsum. At the Laboratoriya TVN Tomskogo politekh nicheskogo instituta -TPI- (Laboratory TVN of the

Card 2/4

66306

Electrical Properties of Crystal, Mydrates

SOV/143-59-5-4/19

the work of Hackett and A.M. Thomas, IIEE Ref 247. The authors state in their conclusions that a rotation of polarized molecules with a low bond energy is possible in crystallohydrates. The position of frequency and temperature maxima of tg \$ and \$ are determined by the structure of crystallohydrates. When manufacturing electrical insulation materials composed of crystallohydrates it should be noticed that polarized molecules may cause relaxation losses and that crystal hydrates work reliably only to the dehydration temperature. There are 11 graphs, 1 table and 24 references, 23 of which are Soviet and 1 English. This article was presented by the kafedra tekhniki vysokikh napryszheniy

ASSOCIATION: Tomskiy ordena Trudovogo Krasnogo Znameni politekhnicheskiy institut imeni S.M. Kirova (Tomsk - Red Labor Banner Order - Polytechnic Institute imeni S.

SUBMITTED:

November 4, 1958

Card 4/4

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"APPROVED FOR RELEASE: 08/10/2001

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Determination of

S/139/62/000/005/007/015 E073/E335

lowest dislocation density was $5 \times 10^3 \text{ cm}^{-3}$; the highest was $5 \times 10^6 \text{ cm}^{-3}$. The density of dislocations increased along the radius from the centre towards the surface due to the presence of a radial temperature gradient in the ingot. Zinc-alloyed GaAs specimens had a relatively low dislocation density. Detailed information on the fusion regimes, structure and electric characteristics of GaAs produced by the mentioned method will be given in articles to be published. There are 3 figures and 1 table.

ASSOCIATION:

Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosuniversitete imeni V.V. Kuybysheva (Siberian Physicotechnical Institute of Tomsk State University imeni V.V. Kuybyshev)

SUBMITTED:

July 19, 1961

Card 2/2

Investigation of the kinetic characteristics of highly doped indium antimonide. V. A. Kokoshkin (10 minutes).

Synthesis, doping, and preparation of single crystals of gallium arsenide.

A. P. Izergin, A. G. Grizor'yeva, V. N. Chernigovskaya, G. H. Ikonnikova.

Crystallization of gallium arsenide under different pressures of arsenic vapor. S. S. Khlubkov, V. A. Kelivanova, G. M. Ikonnikova.

Influence of impurities on the electrical properties of gallium arsenide. M. A. Krivov, Ye. V. Malisova, C. V. Malyanov. (Presented by M. A. Krivov--15 minutes).

Report presented at the 3rd National Conference on Semic Enductor Commounds, Kishdnev, 16-21 Sept 1963

GRIGOR'YEVA, A.G.; CHERNIGOVSKAYA, V.N.; IZERGIN, A.P.

Gallium arsenide synthesis from the melt. Izv.vy#.ucheb.zav.;fiz.nc.2;

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomnkom gosudarstvefinom (Gallium arsenide crystals—Growth)

(Gallium arsenide crystals—Growth)

L 10766-63 EWT(1)/SWG(k)/EWP(q)/EWT(m)/ BDS--AFTC/ASD/ESD-3--P1-L/Pz-L--AT/IJP(C)/JD ACCESSION MR: AP3004032 8/0139/63/000/003/0023/0026 Izergin, A. P.; Selivanova, V. A.; Chernigovskaya, V. N. AUTHOR: Title: The growing of gallium argenide single crystals and single-prystal blocks SOURCE: IVUZ. Fizika, no. 3, 1963, 23-26 TOPIC TAGS: gallium arsenide crystal growth, gallium arsenide zone melting ABSTRACT: Conditions for obtaining single-crystal ingots of galling ersenids by the zone melting method have been studied. Synthesis, sonal gariffication, and crystallization were carried out in one tube with high-frequency heating by a GL-15-M generator. The starting components, gallium and arsunic, were placed in the tube separately. It was found that a lowering of the madial and exial temperature gradients resulted in larger ingle-crystal blocks. This can be attributed to the reduced speed of crystallization, which in this name was 3.5 mm/hr. The crystallization front under these conditions approached the plane. The duration of the contact between the melt and the container was reduced for a given speed of movement. The zone-melting method is aquaidered care to a gradient and the contract of the con - Sobreion Physicateckness Floreto ht Took K. H. (1.

GRIGORIYEVA, A.G.; CHERNIGOVSKAYA, V.H.; IZERGIH, A.P.

Refinement of gallium arsenide by the zone dissolution method. Izv. vys. ucheb. zav.; fiz. no.4:16-18 '63. (MIRA 16:9)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete imeni V.V. Kuybysheva. (Gallium arsenide)

ACCESSION NR: AP4025087

S/0139/63/000/006/0049/0052

AUTHORS: Ikonnikova, G. M.; Izergin, A. P.

TITLE: Effect of melt vibrations on a type of KCl crystals

MOUTHOE: IVUZ. Fizika, no. 6, 1963, 49-52

TOPIC TAGS: induced oscillation, crystal growth, constant frequency, variable amplitude, natural faceting

ABSTRACT: The effect of externally induced cscillations on a KCl melt, at various amplitudes, on the form of the crystal growth has been studied. The Chokhral'skiy method is used for the crystal growth, as described by A. P. Izergin, Yu. S. Pavlenko, and S. A. Stroitelev (Izv. Vuzov SSSR, Fizika No. 1, str. 107-111), from a melt placed in a crucible and vibrated with 100-cycle constant frequency but with a variable amplitude from 0.06 to 0.2 mm measured on a vibrometer. The vibrations causes a transition from a [hKO] face to a [100] face on the crystal surface. The simpler is its form. "The authors are grateful to V. A. Yermolayev for his help in this work." Orig. art. has: 2 figures and 2 tables.

Card 1/2

ACCESSION NR: AP4025087

ASSOCIATION: Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosuniversitete imeni V.V. Kuyby*sheva (Siberian Physical and Technical Institut. Tomsk State University)

SUBMITTED: 14Jul62 DATE ACQ: 14Feb64 ENCL: 00

SUB CODE: PH NO REF SOV: 005 OTHER: 001

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ACCESSION NR: AP4025100 AUTHORS: Chernigovskaya, V. N.; Grigor'ye TITLE: Synthesis of gallium arsenide in gasource: IVUZ. Fizika, no. 6, 1963, 177-17 TOPIC TAGS: gallium arsenide, gallium arsenide, Cu, Fe, Al, Si, semiconductor, silicon ABSTRACT: A new apparatus to be used in gasource and involves an elongated square-section graphite and Elass ampule as to eliminate the graphite-of Enclosure). The apparatus was developed to resulting from the reaction of graphite and necessary for the reaction and for zonal purproduced in this apparatus was free of Si. ranged from zero to acceptably small smounts Orig. art. has: 1 figure and 2 tables.	mide synthesis, graphite boat, impurity, contamination llium arsenide synthesis is described, phite boat so suspended within a quartz uartz contact (see Pig. 1 of the prevent the silicon contamination quartz at the temperature of 12400 crification of mallimb argential.
Card 1/3	

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619410001-9

ACCESSION NR: AP4025100

ASSOCIATION: Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosumiversitete ineni V. V. Kuyby*sheva (Siberian Physical and Technical Institute, Tomsk State
University)

SUBMITTED: 10Dec62

DATE ACQ: 14Feb64

ENCL: 01

SUB CODE: ML, PH

NO REF SOV: 001

OTHER: 002

Cord 3/51

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619410001-9

ACCESSION NR: AP4012291

8/0070/64/009/001/0130/0131

AUTHORS: Ikonnikova, G. M.; Isergin, A. P.

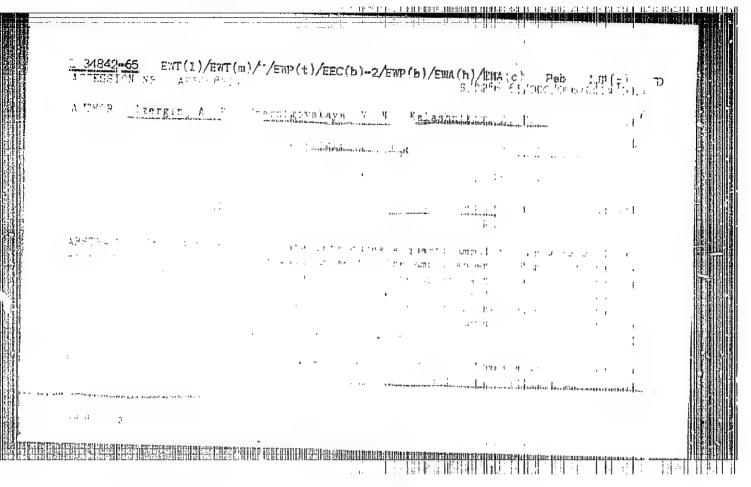
TITLE: Problem of lead admixture entering potassium chlorida crystals under the action of vibrations

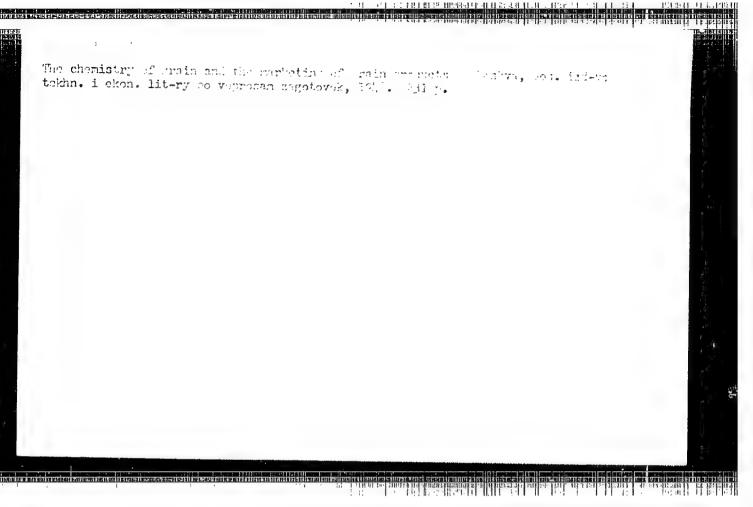
SOURCE: Kristallografiya, v. 9, no. 1, 1964, 130-131

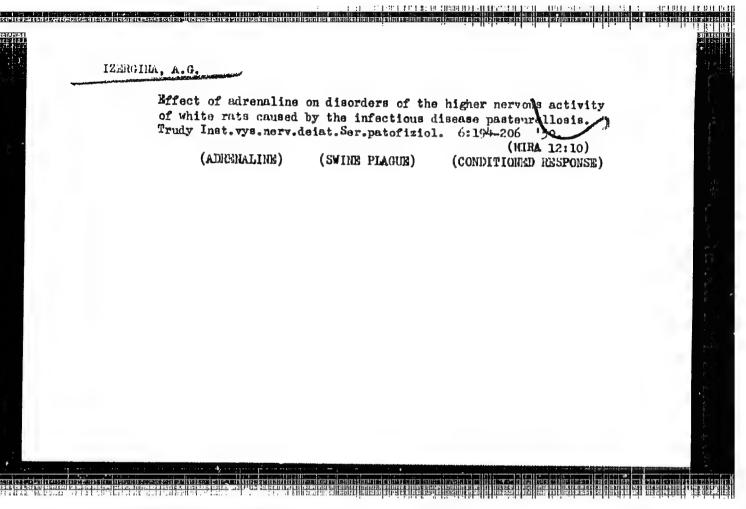
TOPIC TAGS: Pb admixture, Pb in KCl, vibration activity, crystalline growth, base halogen crystal, vibration amplitude, absorption spectrum, F center, absorption coefficient, activator, crystalline lattice

ABSTRACT: The problem in this work consisted of growing single KC1-Pb crystals by the Chokhral'skiy method while vibrating the melt at a frequency of 100 herts. It was desired to determine the influence of various vibration amplitudes on the entrance of Pb into the crystalline lattice. The size of each sample, the amount of PbCl₂, and all experimental conditions were kept constant. Optical absorption spectra were used to study the influence of vibrations on the growing crystal and to determine the amount of admixture influencing the structure of the crystalline lattice. These spectra were recorded at the amplitudes of 0.01-0.2 mm with a spectrophotometer SF-4 at wave lengths of 210-800 m m and at room temperature.

Card 2/2





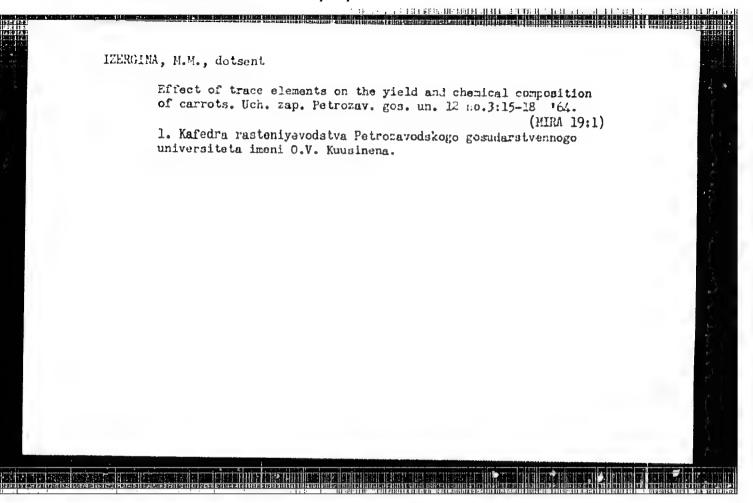


USPENSKAYA, M.S.; IZEHGINA, A.G.

Effect of unithiol on the excretion of Dische-positive compounds in the urine of rats exposed to polonium-210. Radiobiologiia 3 no.5:762-765 '63. (MIRA 17:4)

Card 1/2

- 143 -



IJP(c) EVIT (m) /EVIA (m) -2 I. 3778-66 8/0000/64/000/000/0932/0936 ACCESSION NR: AT5007965 AUTHOR: Vodop'yanov, F. A.; Zhukovskiy, L. S.; Zalmanzon, V. B.; Ivanov, Yu. Izergina, Ye. V.; Kuz'min, A. A.; Prokop'yev, A. I.; Temkin, A. S.; Rubchinskiy, TITLE: System for the generation of the accelerating field of a 70-Gev proton synchrotron 19 SOURCE: International Conference on High Energy Accelerators. Buhna, 1964. Trudy. Moscow, Atomizdat, 1964, 932-936 TOPIC TAGS: high energy accelerator, synchrotron, particle besin, magnetic field ABSTRACT: After the development of a high-precision system of frequency control of the accelerating field of the proton 50-60 Gev synchrotrom with critical emergy compensation (Mints, A. L., et al., Proc. International Conference on High Energy Accelerators and Instruments, CERN 1959), it was decided to achieve an alternative accelerator with transition through the critical energy, which makes it possible to increase the energy to 70 Gev. In this modification of the accelerator merious difficulties are encountered with the realization of a system for generating an addilerating field with frequency control only according to the H-program. Therefore, Card 1/3

L 3778 65 ACCESSION NR: AT5007965 it was decided to achieve a system with twin frequency combrol: rough, according to the H-program, and precise, according to the information on the radial and phase position of the accelerated particle beam. The present report discusses the principal characteristics governing the achievement of a programmed fM-generator, a system of frequency control according to information of the position of the accelerated particle bunches, and accelerator installation. The programmed FK-generator consists of the usual elements: transducer of the derived magnetic field strength (inductive coil in the gap of the measuring electromagnet), electronic switch, tube integrator, modulator, FM-oscillator, phase manipulator, amplitude modulator of accelerating voltage, amplifier-distributor, and a system of cable contacts. To obtain energy increase per revolution of AE = 166 Kev for a rate of change of magnetic field strength of H = 550 oersteds/second and $\phi_{\rm S}$ = 30°, provision is made for the application of 53 accelerator stations with rated input of 7 kilovolts and 6 kilowatts power. Provisions are also made for the short-duration increase of this voltage, 1.8 times up to the time of beam bunching (around 15 microseconds), and its slow decrease to about 2 times less toward the end of the acceleration cycle with the aim of preserving constant equilibrium phase during the fall in the magnetic field growth rate. The system of frequency control of the accelerating field according to the information on the accelerated particle beam position is similar in Card 2/3

L 3778-66 ACCESSION NR: AT5007965				/	
principle of operation to a s (Pribory i tekhnika eksperime: lize the position of the cent phase. Orig. art. has: 1 fig. ASSOCIATION: Radiotekhniches	nta, No. 4, 106, () er of gravity of th gure.	1962)), while beam acc	ich was intercording to re	ded to stabi	
 AN SSSR) SUBMITTED: 26May64 NO REF SOV: 001	EHCL: 00	K (Kano)	SUB CODE:	MP 1	
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IZEWSKI, S.

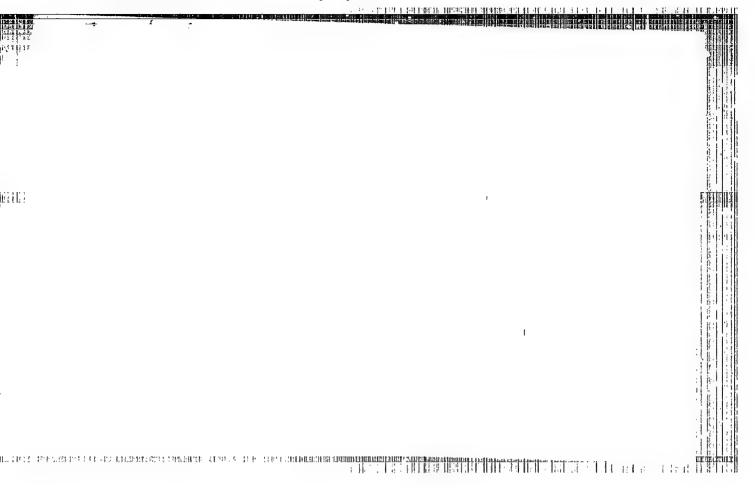
Climatologic problems and the program of teaching geography in pedagogic lycees. p. 143. (Geografia W Szkole, Vol. 10, No. 3, May/June 1957)

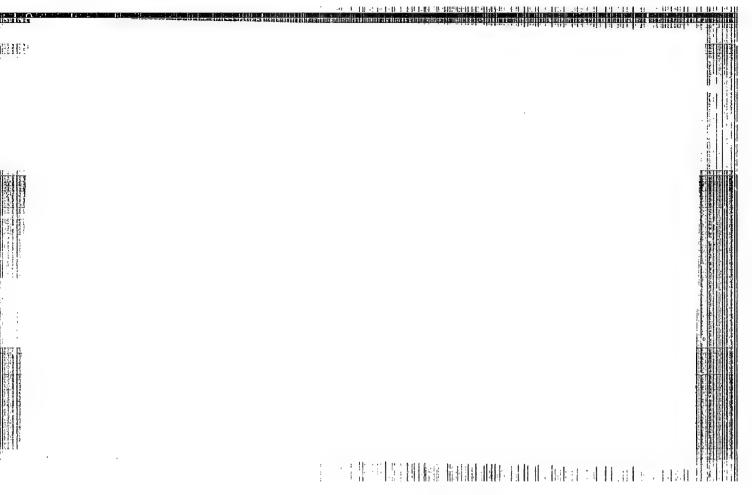
SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 9, Sept 1957, Uncl.

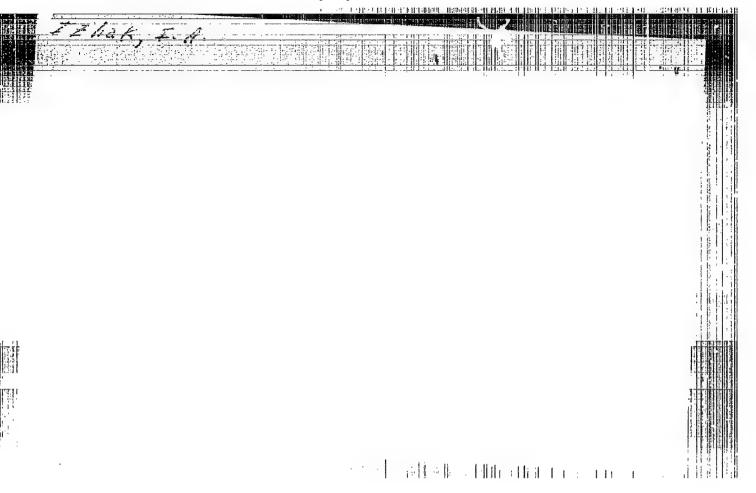
ALEKSEYEV, Ye.K., inzh.; IZGUR, R.M., inzh.; LYUKE, Ye.P., inzh.; NIKO-LAYEVSKIY, Ye.Ya., inzh.; PIROGOV, A.N., inzh.; RODIOHOVA, R.G., inzh.; TOYBIN, V.A., inzh.; FRETDLIN, G.M., inzh.; KHLYUPIMA, A.K., inzh.; CHERNOV, D.L., inzh.; EYDEL'HAMT, L.B., inzh.; ZEMUR, N.S., inzh., retsenzent; MOLYUKOV, G.A., inzh., red.; TIKHAHOV, A.Ya., tekhn.rad.

[Production and installation of pipe systems; reference manual]
Izgotovlenie i montazh tekhnologicheskikh truboprovodov; spravochnoe posobie. Moskva, Gos.nauchno-tekhn.izd-vo manhinostroit.

1it-ry, 1960. 574 p. (MIRA 13:7)







ranga dan mangang mang Tili dan mangang mangan

AUTHOR: TITLE:

IZHAK, I.A.

_ _ _ 11/11 17

The influence of One-Side Compression on Ceramic BaTio, Dielectric Susceptibility in Strong Fields. (Issledovanije vliyaniya odnostoronnego szhatiya na dielektricheskuyu pronitsayemost

PERIODICAL:

keramicheskogo BaTiO, v sil'nykh polyakh, Russian) Zhurnal Tekhn. Fiz., 1957, Vol 27, Nr 5, pp 953 - 961 (U.S.S.R.)

ABSTRACT:

The relaxation effect in seignette ceramics is of great importance. No detailed investigations have, as yet, been carried out. The data given here show that this effect is connected with the structure of the seignette electricum. The dielectricity constant of the ceramic BaTiO, diminishes under the influence of a unilateral compression and increases in the vertical direction both above and below Curie point. This dependence agrees qualitatively with the theoretical conclusions obtained for BaTiO3 monocrystals. The relative modification of & under the influence of pressure depends on the voltage of the electric field and the temperature, and attains 35 - 40% at a pressure of 600 kg/cm2, which, in the average, amounts to about 6.10-4 cm2/kg. If pressure is changed, relaxation is observed. There is a general tendency towards relaxation; both after pressure is brought to bear and after it ceases E decreases in the course of time both in the axial direction

Card 1/2

AUTHOR: IZAK, I.A.

PA - 2079

Contribution of the Thermodynamical Theory of Ferroelectrics
(K termodinamiceskoj teorii segnetoelektricestva, Russian)

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ABSTRACT: The author found the data discussed in the following on polycrystalline data of BaTiO3. These data confirm some conclusions

of the thermodynamic theory: 1) The development of the thermodynamic potential Φ in the case of the existence of elastic tensions σ_{ik} differs from the analytical development in the

case of the lack of such tensions only by the components of the polarization P_i^2 . If only one homogeneous compression (e.g. along

the x axis) exists, then $a_1=a-\mathcal{H}_1\sigma_{xx}$ and $a_2=a\mathcal{H}_2\sigma_{xx}$ are found to exist for the parallel and vertical directions respectively. Here \mathcal{H}_1 and \mathcal{H}_2 denote the striction coefficients and a the

development coefficient if compression is lacking. The coefficients α_1 and α_2 can be determined from the measurements of the

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compression $\theta + 2.8.10^{-3}$.cm²/kg. (The corresponding theoretical value amounts to $+13.10^{-3}$.cm²/kg).

4) Experimental results show that the maximum relative modification of occurs under the influence of pressure in the CORIE point.

Comparison between the theoretical conclusions and experimental data confirms the applicability of the theory to polycrystalling BaTiO₂, at least in the paraelectric range. In the seignette-electric range theory and experiment agree only at temperatures of no more than 10 to 12° below the CURIE point.

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AUTHORS:	Izhak, I. A., Shugurov. O. A. 57-28	-3-14/33
TITLE:	The Piezomodulus of Polycrystalline BaTiO, as I Unidirectional Pressure (Zavisimost p'yezomody stallicheskogo BaTiO, ot odnostoronnego davleni	Dependent on alya polikri-
PERIODICAL:	Zhurnal Tekhnicheskoy Fiziki, 1958 Vol. 28, Nr. (USSR)	. 3. рр. 518520
ABSTRACT:	The piezomodulus of barium titanate d_{33} is conn spontaneous polarization P_2 through the equation $\frac{\kappa_1 P_8 E}{\pi}$, where $\kappa_1 \approx 2.7 \cdot 10^{-12} \text{ cm}^2/2$. 2). The authors here give the results of the interest dependence of the piezomodulus of a release	dyn (Reference
Card 1/4	the dependence of the piezomodulus of a polycrymation on unidirectional pressure, where the piezomodulus of a polycrympolarization was in all experiments caused by a stant load. This was attained by applying a certain 200 kg/cm² to the sample and then additions	stalline szoelectric n equal con-
ing a carrowall or power content of the street of the stre		